



# THAI SOLAR ENERGY PLC

No. 148/2021 14 September 2021

## **CORPORATES**

Company Rating: BBB-

Outlook: Stable

Last Review Date: 30/09/20

## **Company Rating History:**

DateRatingOutlook/Alert30/09/20BBB-Stable26/09/19BBBNegative08/02/16BBBStable

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#### **RATIONALE**

TRIS Rating affirms the company rating on Thai Solar Energy PLC (TSE) at "BBB-" with a "stable" rating outlook. The rating reflects the stable cash flows from the company's renewable power portfolio and the sound performance of its operating power plants. However, these strengths are weighed down by the investment risk and expected rise in financial leverage from the investment in the Onikoube project, the company's largest solar farm.

#### **KEY RATING CONSIDERATIONS**

#### Solid and reliable cash flow

TSE's solid cash flows from its power portfolio continue to underpin the rating strength. TSE's stable cash flows are supported by multi-year power purchase agreements (PPAs) with creditable utility off-takers. The low operational risks of solar farms and proven operational records also enhance the creditability and earnings predictability of the solar projects.

TSE's power production from solar farms remains the primary source of cash generation. In total, TSE's power portfolio currently holds contracted capacity of 299.9 megawatts (MW). Its installed capacity is 350.8 MW. Solar power constitutes about 92% of total installed capacity, while biomass power makes up the remainder. Of the total installed capacity, about 203.8 MW is operational.

TSE's power generating assets rendered THB1.4-THB1.5 billion per annum in earnings before interest, tax, depreciation, and amortization (EBITDA) over the past two years. The majority of TSE's cash flow is derived from a pool of solar farms, which are owned by Thai Solar Renewable Co., Ltd. (TSR), a joint venture between TSE and Global Power Synergy PLC (GPSC). TSR's solar farms, which started commercial operations in 2013-2014, receive adder of THB6.5 per kilowatt-hour (kWh) on top of the base tariff for a period of 10 years. TSE holds a 60% share in TSR. On a proportionate basis, TSR contributes 55%-60% of TSE's total EBITDA.

# **Consistent power operation**

Overall, TSE's power plants have performed consistently well and in line with our forecasts. Total power output in 2020 was 421 gigawatt-hours (GWh), up by about 4.5% from 2019. In the first half of 2021, output was 223 GWh, an increase of 2.9% from 216 GWh in the same period last year. The slight growth partly stemmed from new projects coming online, including a 5-MW operating solar farm in Krabi and an 8-MW floating solar farm in Prachinburi. The floating solar farm just started commercial operations in May 2021.

# Challenging business environment for capacity growth

In our view, the renewable power market has become increasingly challenging. Despite government policies to reduce reliance on fossil fuels for power generation, investment opportunities for renewable power in Thailand appear to be less attractive than during the boom period many years ago. Notwithstanding the potential rise in renewable penetration in the years ahead, Thai renewable power companies are leaning towards investments outside Thailand or under private PPAs, given the cut-off of incentive tariffs,





intense bidding competition, repeated delays in public projects, and declining returns on investment.

With this backdrop, we are of the view that TSE's aim to add 100-200 MW of capacity within the next 3-5 years is quite challenging. We expect TSE will realize growth by acquiring small operating power assets in Thailand and undertaking greenfield projects overseas.

## Investment risk in the Onikoube project

The Onikoube project is a large-scale solar farm in Japan, which TSE started developing in 2017. The company decided to undertake the project to offset an anticipated material decline in earnings when TSR's solar farms in Thailand no longer receive incentive adders. The project is slated to commence operation in the fourth quarter of 2022.

The investment in the project has put immense pressure on TSE's credit profile. The project has induced concentration risk given the huge scale of the investment relative to the size of the company's power asset portfolio. The project relies heavily on debt financing and will take about three years to complete the construction. TSE has been carrying a heavy debt load over the course of the development. That said, the project's low country risk and the favorable tariff rate of JPY36 per kWh should prove to be positive factors for TSE's credit profile in the long term.

## EBITDA expected to sustain after adder expiration

We expect new cash flows from the Onikoube project will adequately compensate for the loss of earnings caused by the phase-out of adders during 2023-2024. In our base case, we conservatively estimate the Onikoube project will start commercial operation in early 2023, bringing in EBITDA of at least THB800 million per annum. Despite the potential significant earnings contribution, there may be downside risk stemming from its unproven performance. The project layout was changed considerably in 2019, resulting in much smaller areas for the installation of solar modules than in the initial design. In our view, increasing the installation density raises concerns over plant efficiency and power outputs in the long term.

Besides the Onikoube project, we assume that TSE will likely add 5-10 MW per year of new renewable power projects to its portfolio. In effect, we forecast EBITDA to be THB1.4-THB1.5 billion during 2021-2022, rising to THB1.9 billion in 2023. We expect EBITDA to decline to a sustainable range of THB1.4-THB1.5 billion per year after the adders expire entirely. We forecast funds from operations (FFO) will remain below THB1.0 billion per year during 2021-2022 before soaring to THB1.3 billion in 2023.

# Financial leverage on the rise

We expect TSE's capital spending to remain significant over the next few years while the Onikoube project is carried through. We assume the investments will total THB8.7 billion during 2021-2023, including THB7 billion for the remaining construction costs of the Onikoube project and about THB1.6 billion for new acquisitions. In our forecast, we also consider the likelihood of partial divestment of existing power assets to alleviate the pressure on debt load.

In our base-case scenario, we expect TSE's financial profile to weaken further. The net debt to EBITDA ratio is projected to reach a peak of about 10 times in 2022. The ratio of debt to capitalization should stay at nearly 70%. Financial leverage should gradually decline once the Onikoube project starts to generate cash in 2023.

# Liquidity remains manageable

In assessing TSE's financial profile and performance, we include the respective assets, liabilities, and financial performance of TSR in TSE's consolidated accounts, in proportion to the ownership stake.

We assess the company's liquidity as manageable. As of June 2021, total loans coming due in the next 12 months neared THB2.8 billion, comprising a long-term loan installment of THB0.98 billion and bridging loans of THB1.8 billion. At the same time, TSE's sources of funds totaled THB2.05 billion, including cash and cash equivalents of THB1.1 billion and estimated FFO over the next 12 months of THB0.95 billion. TSE may need to roll over parts of its bridging loans. In our view, the refinancing risk is mitigated by TSE's worthy power assets, and the record of strong support it receives from its main bank.

# **Capital structure**

At the end of June 2021, TSE's outstanding debt, excluding financial lease, amounted to THB13.6 billion. The debt included THB9.8 billion of priority debt which was composed entirely of secured loans. This means the ratio of priority debt to total debt was about 72%. As its priority debt ratio is more than the threshold of 50%, we view that TSE's unsecured creditors are significantly disadvantaged with respect to the priority of claims against TSE's assets.





#### **BASE-CASE ASSUMPTIONS**

- Total operating revenues of about THB2.3-THB2.4 billion per year during 2021-2022. The revenue will soar to a peak of THB3 billion in 2023 when the Onikoube project starts operation
- EBITDA margin (EBITDA as a percentage of total operating revenue) of around 62% during 2021-2023
- Total capital expenditure (CAPEX) amounting to about THB8.7 billion during 2021-2023
- Dividend payout ratio of 30%

## **RATING OUTLOOK**

The "stable" outlook embeds our expectation that TSE's power portfolio will continue to deliver sound performance and render robust cash flows. Furthermore, we expect the Onikoube project to progress as scheduled with no significant cost overruns. Over the course of project development, we expect TSE will prudently manage its liquidity, and that the company will not engage in any investments that would significantly weaken its financial profile.

#### **RATING SENSITIVITIES**

The rating upside during the development of the Onikoube project is limited but it could emerge if TSE strengthens its capital structure significantly, which could result from selling part of its stake in the Onikoube project or raising new equity, such that the ratio of debt to EBITDA declines to below 8 times.

A rating downgrade could occur if TSE's financial profile deteriorates further, which could result from aggressive debt-funded investments or significantly lower-than-expected performance of the Onikoube project.

#### **COMPANY OVERVIEW**

TSE is an investment holding company, established in 2008, to primarily focus on developing renewable power projects. The company was listed on the Market for Alternative Investment (MAI) in October 2014. TSE's shares were moved to trade on the Stock Exchange of Thailand (SET) in May 2019.

At the end of August 2021, the company has 41 renewable power projects in the portfolio. Total installed capacity is about 350.8 MW while total contracted capacity is 299.9 MW. The equity installed capacity is 307.2 MW. All projects are in operation, except the Onikoube project, a large-scale solar power plant in Japan.

TSE's core power project, comprising 10 solar farms, is operated by Thai Solar Renewable Co., Ltd. (TSR), a 60:40 joint venture (JV) between TSE and Global Power Synergy PLC (GPSC). The project's installed capacity is 104.8 MW with contracted capacity of 80 MW. The project is a centerpiece of profit-making, generating over 60% of TSE's EBITDA in 2020. TSE is constructing the Onikoube project with an installed capacity of 147 MW and a contracted capacity of 133 MW. The project is scheduled to commence operations in the fourth quarter of 2022.





# **KEY OPERATING PERFORMANCE**

Table 1: Power Project Portfolio as of 31 Aug 2021

Project/Country	Hold by TSE (%)	Status	Installed Capacity (MW)	Contracted Capacity (MW)	Tariff	Commercial Operating date	
Thailand							
<u>Solar</u>							
TSR (SSE1)	60	Operating	104.8	80	Adder Bt6.5	Jul-13- Jun14	
Solar Rooftop	100	Operating	14	14	FIT Bt6.16	Sep14 - Aug15	
SLC (Prajuabkiri)	100	Operating	1	1	FIT Bt5.66	Dec 16	
INS (Ang Thong)	100	Operating	2	2	FIT Bt5.66	Dec 15	
BSS (Ayuthaya)	100	Operating	5	5	FIT Bt5.66	Dec 16	
SSP (Ang Thong)	100	Operating	9.7	8	Adder Bt8.0	Mar 13	
MARS (Krabi)	100	Operating	5	5	FIT Bt4.12	Dec 18	
BPT (Prachinburi)	100	Operating	8	8	Private PPA	May 21	
<u>Biomass</u>							
BSW	100	Operating	6	4.6	FIT Bt4.24 + Premium Bt0.3 (8 years)	Mar18	
OSW 1 & 2	100	Operating	19.8	17.6	FIT Bt4.24 + Premium Bt0.3 (8 years)	Aug-Oct-18	
			175.3	145.2	· , , ,		
<u>Solar</u>							
Kuno	100	Operating	0.65	0.5	FIT JPY36	Aug 15	
Shima	100	Operating	1.43	1.25	FIT JPY32	Mar 16	
Hikeme	100	Operating	1.86	1.5	FIT JPY32	Apr 16	
Ryugasaki	100	Operating	2.36	1.75	FIT JPY36	Sep 16	
Sakura	100	Operating	2.56	1.99	FIT JPY32	Nov 17	
Jyoso	100	Operating	1.59	1.25	FIT JPY36	May 18	
Hanamizuki	100	Operating	18.1	13.5	FIT JPY36	Jan 19	
Onikoube	100	Developing	147.0	133.0	FIT JPY36	Q4 2022	
			175.5	154.7			
Total Capacity			<u>350.8</u>	<u>299.9</u>			

Source: TSE





## FINANCIAL STATISTICS AND KEY FINANCIAL RATIOS\*

Unit: Mil. THB

		Year Ended 31 December			
	Jan-Jun 2021	2020	2019	2018	2017
Total operating revenues	1,279	2,441	2,297	1,481	1,172
Earnings before interest and taxes (EBIT)	560	909	958	666	625
Earnings before interest, taxes, depreciation, and amortization (EBITD,	853	1,475	1,463	1,088	859
Funds from operations (FFO)	616	1,024	1,220	720	605
Adjusted interest expense	238	450	238	283	247
Capital expenditures	395	2,756	446	2,304	1,737
Total assets	20,577	20,407	17,362	16,352	14,125
Adjusted debt	12,749	12,820	10,249	10,233	8,171
Adjusted equity	6,301	5,919	5,632	4,915	4,781
Adjusted Ratios					
EBITDA Margin (%)	66.7	60.4	63.7	73.5	73.4
Pretax return on permanent capital (%)	5.0**	4.9	5.8	4.5	5.2
EBITDA interest coverage (times)	3.6	3.3	6.1	3.8	3.5
Debt to EBITDA (times)	8.2**	8.7	7.0	9.4	9.5
FFO to debt (%)	8.3**	8.0	11.9	7.0	7.4
Debt to capitalization (%)	66.9	68.4	64.5	67.6	63.1

<sup>\*</sup> Consolidated financial statements

Note: All figures and financial ratios are adjusted by including TSR's financial performance (80-MW solar farm projects) on proportionate basis instead of equity method.

# **RELATED CRITERIA**

- Rating Methodology Corporate, 26 July 2019
- Key Financial Ratios and Adjustments, 5 September 2018

<sup>\*\*</sup> Annualized with 12 months trailing





## Thai Solar Energy PLC (TSE)

Company Rating:

Rating Outlook:

Stable

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